

Electro-Voice

ELECTRO-VOICE, INC.
BUCHANAN, MICHIGAN



Specifications and Instructions

Models X6, X8, X425,
X825, X36, X336, X2635

Crossover Networks



Model X36

Electro-Voice crossover networks are high-Q low insertion loss, frequency discriminatory filters designed for use in systems having a characteristic impedance of 16 ohms. All E-V crossovers are of the constant-K configuration. A basic advantage of the constant-K-type filter is that identical values of components may be used in both series and shunt arms; thus, identical phase rotation and transient response are insured on either side of the crossover frequency.

E-V crossovers are designated by the 3 db down point in the network frequency response curve. For example, the high-pass section of the X8 crossover is 3 db down at 800 cps, as is also the low-pass section. Attenuation in Electro-Voice networks takes place at the rate of 12 db per octave for $\frac{1}{2}$ -section filters and 6 db per octave for $\frac{1}{4}$ -section networks.

Because high-Q air-core inductors are used in these crossover networks, filter characteristics are maintained constant despite changes in average values of program level. Electro-Voice crossovers will safely handle up to 100 RMS watts. Since the average level of program material in home listening rarely exceeds 2 watts, the safety margin inherent in the design of these units is indeed a large one.

All Electro-Voice crossover networks are housed in drawn steel cans. Finish is gray and the component parts are potted in a thermoplastic asphalt.

SPECIFICATIONS

Model	X425	X6	X8	X825	X36	X336	X2635
Crossover Frequency	400 cps	600 cps	800 cps	800 cps	3500 cps	300 cps 3500 cps	200 cps 600 cps 3500 cps
Impedance	16 ohms	16 ohms	16 ohms	16 ohms	16 ohms	16 ohms	16 ohms
Insertion Loss—Lo Hi	.8 db .3 db	.6 db 0 db	.5 db 0 db	.8 db .3 db	.75 db 0 db	1.5 db/.6 db 0 db	1.5 db/.6 db 0 db
Section	$\frac{1}{4}$ section	$\frac{1}{2}$ section	$\frac{1}{2}$ section	$\frac{1}{4}$ section	$\frac{1}{2}$ section	$\frac{1}{2}$ section $\frac{1}{4}$ section (300 cps)	$\frac{1}{2}$ section $\frac{1}{4}$ section (200 cps)
Attenuation	6 db/oct.	12 db/oct.	12 db/oct.	6 db/oct.	12 db/oct.	12 db/oct. 6 db/oct.(300 cps)	12 db/oct. 6 db/oct.(200 cps)
Phase Rotation	135°	270°	270°	135°	270°	270° 135° (300 cps)	270° 135° (200 cps)
Dimensions—Height Depth Width	4 $\frac{1}{16}$ 3 $\frac{3}{16}$ 4 $\frac{7}{16}$	5 $\frac{7}{16}$ 4 $\frac{9}{16}$ 5 $\frac{1}{4}$	4 $\frac{1}{16}$ 3 $\frac{3}{16}$ 4 $\frac{7}{16}$	3 $\frac{7}{16}$ 3 $\frac{3}{16}$ 4 $\frac{7}{16}$	3 $\frac{7}{16}$ 3 $\frac{3}{16}$ 4 $\frac{7}{16}$	5 $\frac{7}{16}$ 4 $\frac{9}{16}$ 5 $\frac{1}{4}$	6 $\frac{1}{16}$ 5 $\frac{1}{4}$ 5 $\frac{7}{8}$
Shipping Weight	4 lb	5 lb	4 lb	3 lb	2 lb	9 lb	11 lb

MODEL X425 — The X425 crossover network is designed for use with most E-V woofers or coaxial drivers in an infinite baffle when it is desired to cross over to the mid-range from the bass driver at a lower frequency.

MODEL X6 — The X6 crossover network is designed for use with the Electro-Voice T25A or T10A driver units and 6HD Hoodwin diffraction horn.

MODEL X8 — The X8 crossover network is designed for use with the Electro-Voice T25A or T10A driver units and 8HD Hoodwin diffraction horn. The X8 is used in both the Aristocrat II and III systems, the Regency II and III systems, and the Empire II and III systems.



